

Date: Thursday, 11/09/2008 10:43:22 AM  
 User: Julie Lecocq

## Process Sheet

<b>Customer</b> : CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> : TUBE ASSEMBLY
<b>Job Number</b> : 41985	
<b>Estimate Number</b> : 13287	
<b>P.O. Number</b> :	<b>Part Number</b> : D3697041
<b>This Issue</b> : 11/09/2008 <b>S.O. No.</b> :	<b>Drawing Number</b> : D3697 REVB
<b>Prsht Rev.</b> : NC	<b>Project Number</b> : N/A
<b>First Issue</b> : / / <b>Type</b> : LARGE FAB ASSY	<b>Drawing Revision</b> : B
<b>Previous Run</b> : 41223	<b>Material</b> :
<b>Written By</b> :	<b>Due Date</b> : 05/10/2008 <b>Qty:</b> 4 <b>Um:</b> Each
<b>Checked &amp; Approved By</b> : <u>JUD 08.9.11</u>	
<b>Comment</b> : Est Rev:A 08-04-25 new issue DD verified by:EC Est Rev:B 08-07-14 revB as per dwg DD verified by:ec	

## Additional Product

Job Number:



<b>Seq. #:</b>	<b>Machine Or Operation:</b>	<b>Description :</b>
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1.0	M6061T6T0375W049	6061-T6 RD Tube .375 x.049W
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**Comment:** Qty.: 6.3000 f(s)/Unit Total: 25.2000 f(s)  
 6061T6 aluminium tube OD 0.375" X 0.049" wall  
 (M6061T6T0.375W0.049)  
 Batch: M109000 *48' total*

2.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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**Comment:** SMALL & MEDIUM FAB RESOURCE 1

1- cut at 6.00" as per dwg D3697

2- form and trim tube as per dwg D3697 using DT9003

3-deburr

3.0	QC5	INSPECT WORK TO CURRENT STEP
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**Comment:** INSPECT WORK TO CURRENT STEP

4.0	PACKAGING 1	PACKAGING RESOURCE #1
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**Comment:** PACKAGING RESOURCE #1

Pick Packing Kit

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
9/1/17	1	3/6" diam. used in the development of this product N/A						

**NOTE:** Date & initial all entries

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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TUBE ASSEMBLY

Job Number: 41985

Part Number: D3697041

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

D37971

Ground Plate



✓ Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)  
Ground Plate  
batch: B41023

EL 9-1-7 x4

6.0

D36973

Support Plate, LH



✓ Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)  
Support Plate, LH  
batch: B40662

EL 9-1-7 x4

7.0

D36974

Support Plate, RH



✓ Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)  
Support Plate, RH  
batch: B40663

EL 9-1-7 x4

8.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-weld D3697-3/-4 and D3797-1 on tube D3697-1 as per dwg D3697 using DT9003 welding jig  
2-drill holes in tube in 5 pls as per dwg D3697

EL 9-1-7

9.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

2E 9-1-07 (4x)

~~09/01/07 (4x)~~

10.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

~~09/01/07 (4x)~~

~~2E 9-1-07 (4x)~~

11.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Chemical Conversion Coat as per QSI 005 4.1

FD 09/01/08 (4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TUBE ASSEMBLY

Job Number: 41985

Part Number: D3697041

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

09-08-01

(K4)

13.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: Sylvie

*Re g/01/08*

14.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

*4*  
*AD 09/01/09*

Job Completion



*MF 09-01-08*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

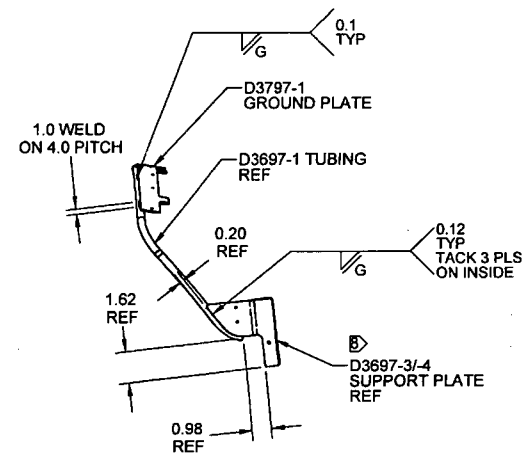
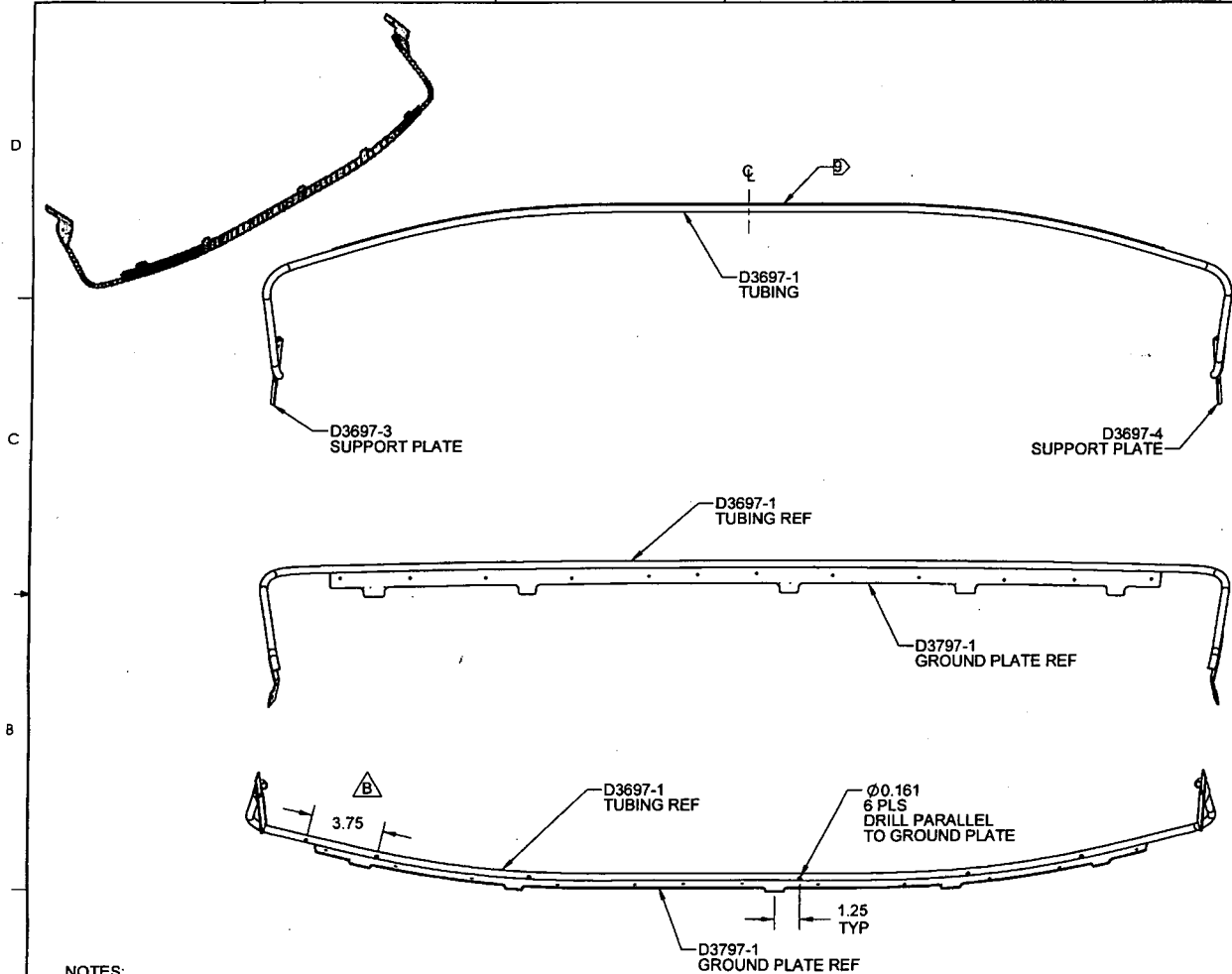
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

8 7 6 5 4 3 2 1



RELEASED  
05-06-02

PART LIST

QTY -041	PART NUMBER	DESCRIPTION
X	D3697-041	TUBE ASSEMBLY
1	D3697-1	TUBING
1	D3697-3	SUPPORT PLATE
1	D3697-4	SUPPORT PLATE
1	D3797-1	GROUND PLATE

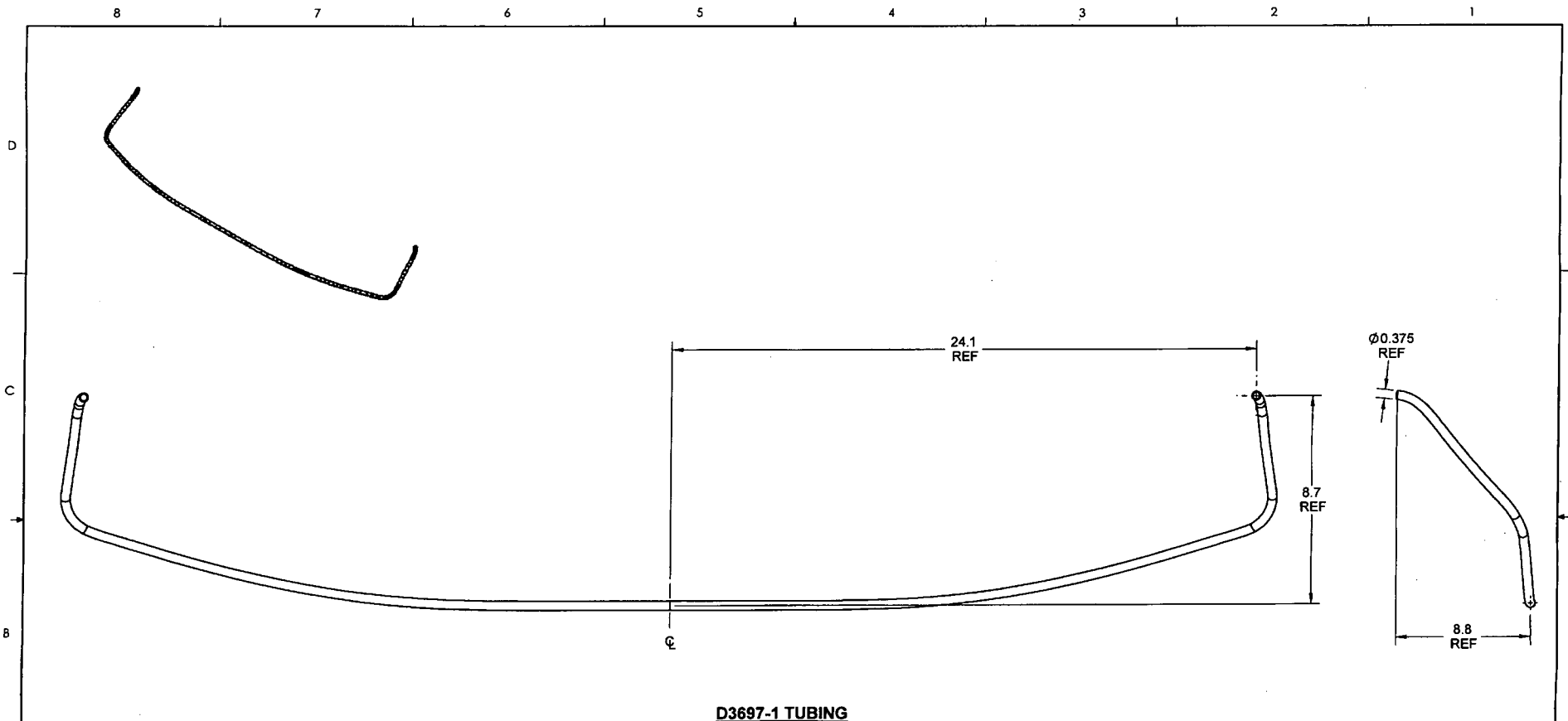
- NOTES:
- 1) WELD PER QSI 004
  - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED  
BREAK SHARP EDGES: 0.005 TO 0.010 MAX  
IDENTIFICATION: NONE  
WEIGHT: 0.55 lbs  
LOCATE D3697-3/4 ON D3697-1 USING DT9009 WELDING JIG  
LOCATE D3797-1 GROUND PLATE ON D3697-1 TUBING

D3697-041 TUBE ASSEMBLY

B	REMOVE POWDER COAT & MASKED HATCHED AREAS. SHEET 1 ZONE A.8; ADD Ø0.161 HOLE. SHEET 1 ZONE B.7	RF	08.06.02
A	NEW ISSUE	RF	08.05.26
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF	DRAWING NO.	REV. B
CHECKED	RF	D3697	SHEET 1 OF 3
MFG. APPR.	RF	TITLE	SCALE
APPROVED	RF	TUBE ASSEMBLY	NTS
DE APPR.	RF	COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	08.06.02		

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7 6 5 4 3 2 1



**D3697-1 TUBING**

**NOTES:**

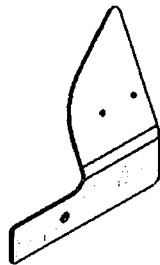
- 1) MATERIAL: 6061-T6 OR 6061-T62 (VW-T-700/6) ALUMINUM TUBING  $\phi 0.375 \times 0.049$  WALL (REF. DART SPEC. M6061T6T0.375W0.049)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.26 lb
- 8) FABRICATE USING TEMPLATE DT9003

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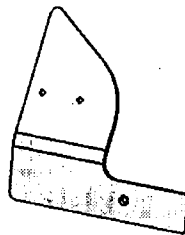
DESIGN	RF	<b>DART AEROSPACE LTD</b>	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	RF	DRAWING NO. <b>D3697</b>	REV. B
MFG. APPR.	RF	SHEET 2 OF 3	
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	<b>TUBE ASSEMBLY</b>	NTS
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**RELEASED**  
 11/06/05

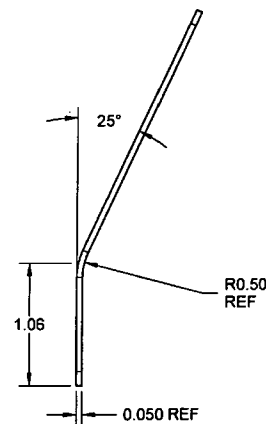
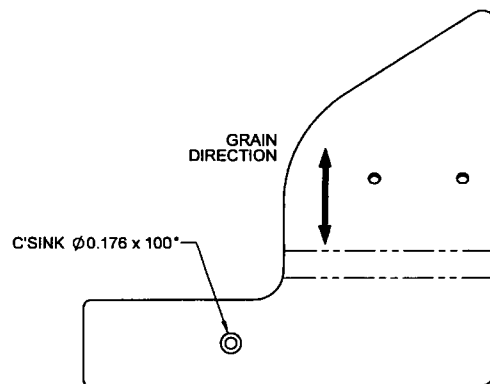




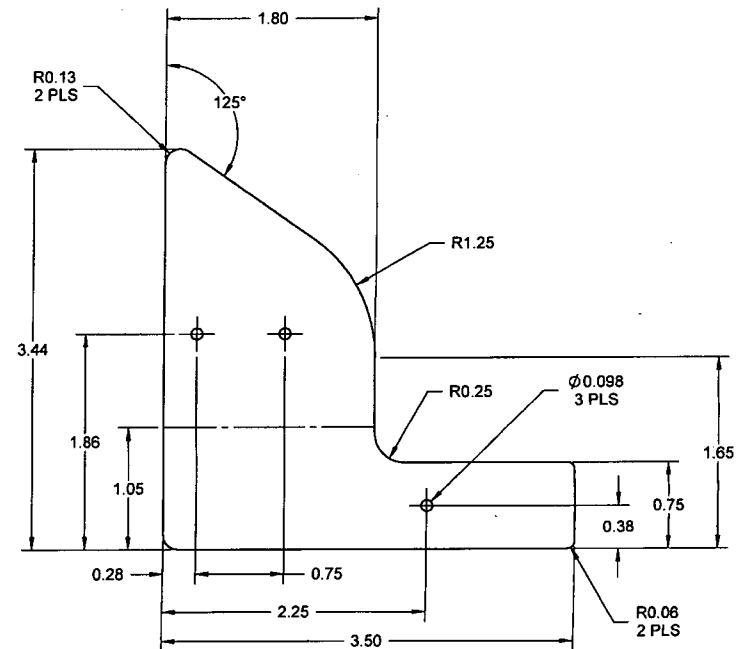
**D3697-3 SUPPORT PLATE (LH SHOWN)**



**D3697-4 SUPPORT PLATE (RH SHOWN)**



**D3697-3 SUPPORT PLATE (LH SHOWN)  
(D3697-4 SUPPORT PLATE OPPOSITE)  
(MAKE FROM D3697-3F FLAT PATTERN)**







**D3697-3F FLAT PATTERN**

**RELEASED**  
08-07-07

**NOTES:**

- 1) MATERIAL: 6061-T6 (QQ-A-250/11) SHEET 0.050 THICK (REF. DART SPEC. M6061T6S.050)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.03 lbs

DESIGN	RF	<b>DART AEROSPACE LTD</b>	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		<b>D3697</b>	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		<b>TUBE ASSEMBLY</b>	NTS
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